MCHD-SI October 9, 2002

MEMORANDUM FOR RECORD

SUBJECT: Minutes from the Fort Detrick Restoration Advisory Board (RAB) Meeting
October 9, 2002

1. Index of Minutes

Items addressed at the meeting are listed below, with corresponding section numbers indicated in the column on the right.

2. Meeting Opening

Lieutenant Colonel Donald Archibald convened the meeting at 7:40 p.m., on Wednesday, October 9, 2002 in Conference Room 3, 810 Schreider Street, Fort Detrick, Maryland.

3. Attendance

Members Present:

Colonel John Ball, Commander, US Army Garrison, Fort Detrick
Lieutenant Colonel Donald Archibald, P.E., Director, Safety, Environment, and Integrated Planning Office (SEIPO), Installation Co-Chairman
Mr. Gerald P. Toomey, Community Co-Chairman
Mr. Larry Bohn, Frederick County Health Department
Mr. Joe Gortva, Environmental Restoration Manager, SEIPO
Mr. Thomas Meyer, Project Manager, US Army Corps of Engineers, Baltimore District
Mr. Daniel Patton, Safety and Loss Control Manager, City of Frederick
Ms. Linda Robinson, Community Member
Mr. Douglas Scarborough, Restoration Oversight Manager, US Army Environmental Center
Mr. Stewart Taylor, Community Member
Ms. Gyla Crutchfield, Analytical Services, Inc. (Recording Secretary)

Others Present:

Mr. Chuck Dasey, Public Affairs Officer, HQ USAMRMC
Ms. Katie Dunn, Frederick News-Post
Mr. David Iseri, Shaw Environmental
Mr. William Kahl, Maryland Department of the Environment
Mr. Clint Kneten, US Army Corps of Engineers
Mr. L. Craig Maurer, US Army Corps of Engineers
Mr. Gary Pauly, Local Resident
Mr. John Robertson, Local Business Person
Mr. Kirk Ticknor, Shaw Environmental
Mr. Bruce Ware, US Army Corps of Engineers

Members Absent:

Ms. Helen Alexander, Community Member
Mr. Charles Billups, Ph.D., Community Member
Mr. William Effland, Ph.D., Community Member
Mr. Michael Gresalfi, Community Member
Mr. Michael Kurtianyk, Community Member
Ms. Helen Miller-Scott, Community Member
Mr. Paul Offutt, Program Manager, Frederick County Health Department
Mr. Dennis Orenshaw, US Environmental Protection Agency (USEPA), Region III
Mr. Craig Toussaint, Community Member
Mr. Thomas Wade, Community Member

4. Opening Remarks and Introductions

Lieutenant Colonel Don Archibald welcomed everyone to the meeting and gave a brief overview of the continuing excavation of soils from Pit 1 and the finding of additional vials, deteriorating canisters, and cylinders. The results of periodic samplings, which are performed as financially feasible, have been received and will be explained further. The sampling testing process has been delayed somewhat due to one of the testing laboratories being closed for a short period of time in order to prepare for a quality assurance inspection. It was noted that the project has now successfully operated nearly 600 days without lost-time accidents and that worker and community safety remains most important.

Lieutenant Colonel Archibald then introduced Mr. Tom Meyer who provided a slide and video presentation regarding the status of the remediation project.

5. Area B-11 Status

A Fort Detrick Remedial Investigation (RI)/Feasibility Study (FS) handout (Enclosure 1) was provided.

Mr. Meyer advised that nearly 900 cubic yards of soil has been removed since the August 21 RAB meeting. Found in this soil were 99 vials, 42 metal containers, and more than 40 drums. He stressed that the vials and other containers were either forwarded to appropriate laboratories for testing or remain in safe storage pending characterization and disposal. Describing a photograph in the presentation, Lieutenant Colonel Archibald interjected that about two months ago, a number of vials were found in a bundle. After analysis of some of these vials, it was learned that no pathogenic material was found. However, some of the sampling indicated a vaccine strain of anthrax, which could have originated from an offensive biological project conducted at Fort Detrick prior to 1970. This material will go through confirmatory testing by another laboratory after which the information will be distributed to the public.

Ms. Linda Robinson requested explanatory background information on the development of vaccines as well as further description regarding the material identity of the anthrax vaccine strain found recently. Lieutenant Colonel Archibald and others provided the response to include the particular contents of the three vials recently identified. These vials were found to contain a non-infectious form of bacillus anthracis indicating it was the vaccine strain, which was part of the work being done at Fort Detrick during the period prior to 1970. Mr. Gerald Toomey asked when the original anthrax vaccine was developed and was informed that the vaccine had been in development stages and had various prototypes for several years prior to its approval by the FDA in 1970. It was stated that the actual original vaccine may have been developed in Australia.

Colonel John Ball further described the materials being located in the soil from Pit 1 and the process to decontaminate and identify the contents. Initial review with an electron microscope did not indicate materials of particular interest and representative samples were obtained and

sent for further testing. Had the original survey indicated materials of increased interest, the testing would have been accelerated. The samples were sent to the Edgewood Chemical Biological Center for additional testing. Colonel Ball added that not all sealed vials are opened. Rather, the environment is monitored daily, in multiple areas, and, to this point, there have been no pathogens evident. Since it is cost prohibitive to process all sealed vials, a representative sample of the contents is taken. Colonel Ball also expressed his surprise at learning that the United States, being one of the most advanced technological nations in the world, is very poor in its ability to identify biological samplings. The United States does not have the ability to rapidly and accurately identify biological culture samples. The initial culture growth sampling was identified quickly, but must be followed by a more accurate polymerase chain reaction (PCR) test, which takes four to five additional days. The results of these tests then indicated that the strain is a non-virulent, deactivated form of vaccine.

Ms. Robinson further inquired that if the non-virulent pathogens were used in the environment of vaccine production would that indicate that the virulent type would also be present? Colonel Ball provided an affirmative response and added that originally it was thought that the materials in the pits would be found to be industrial hazardous waste. However, several months ago, it was apparent that some of the materials were biological live bacteria (i.e., e coli, pneumonia, etc.). In fact, when the first live bacterium was located in the pit, the B-11 area was, essentially, built into a huge containment structure in which to continue the work. It was also stressed that the anticipation of live bacteria in the pits enabled the proper safety procedures to be enacted. Colonel Ball stated that it is important to know the identity of these materials, but the major concern remains that no live pathogens have been found in any of the air, soil, or wipe samples inside and outside the structure. Furthermore everything coming out of the area is thoroughly sanitized. It was summarized that conceivably, there will be additional vials found containing live bacteria. Colonel Ball reiterated that whenever abnormal results are received, the excavation ceases, and an examination of the materials and protocol is reviewed. Activity resumes only after assurance that the proper safety procedures are in place. He also reminded everyone that burying of these materials in a landfill was an acceptable method of disposal during the earlier period of research. Colonel Ball advised that the Army has been financially supportive of this effort, and remains involved in the continuing cleanup activities.

Mr. Toomey asked about safety procedures should a worker be contaminated. He was told that in the unlikely event that a worker would be contaminated, a pre-established safety procedure would go into effect. Identification would be made as quickly as possible with a PCR test, which would tag the DNA of the air stream. A PCR sample is performed on a daily basis before anyone is cleared out of the site. This is considered a rapid base test, which can produce false-positives, but is the most accurate test currently available. A large amount of bleach is being used on the site and the bacteria are being reduced significantly. Soil, air, and filters are tested routinely and each worker goes through a decontamination process every day. It was noted that workers do not wear their street clothing into the structure, but rather are supplied with “scrubs” and appropriate protective suiting. Each worker showers after coming out of the containment structure before returning to street clothes, and the protective suit worn that day is given a

"swipe" test. The scrubs are then sent out to launder. All of these processes are in place to avoid any possible contamination of workers. Colonel Ball added that the workers are also immunized and medical monitoring is routinely conducted. He also reminded everyone that this project began as a result of groundwater contamination and has become much more complicated than originally expected.
Audience members commented that this has been a learning experience and has provided methods of waste removal and material testing that is near cutting edge. Improvements in earlier testing methods have now provided more accurate results, going from a 10 percent accuracy rating to 90 percent. Lieutenant Colonel Archibald advised that this educational benefit would be shared with universities and other organizations.

Mr. Meyer then continued with the presentation, indicating that the drums most recently excavated were very rusty and decomposed. The metal containers retrieved were described as sealed cylinders and are currently being stored in a locker pending characterization, analyses, and eventual disposal. On the graphic, Mr. Meyer pointed out areas of the pit where these objects have been located.

A discussion developed regarding the freeze wall and the current thawing of particular areas of the barrier. Clarification of the effect of the freeze wall and the area captured within its boundaries was provided. Although the pit is approximately eight times larger than originally designed, assurance was given that the entire landfill area is encapsulated within the freeze wall based upon the results of the trenching done prior to commencement of the project. Digging delineated the pit. Since pits are routinely a regular shape, the freeze wall was backed off and installed certain footage from that determined line. Currently, the freeze wall is approximately six feet thick and thawing being done to enable excavation of additional soil within the pit area. Re-delineation of the pit is possible but unlikely. Further description of the trenching and drilling process was provided.

Additional container removal facts were presented to include the presence of an on site drum grappler, container sizes, and current status of analyses. The status of air treatment units was reviewed and noted that one unit will be replaced after failing several hot dioctyl phthalate (DOP) tests. The bleaching procedure was also described. Delays in production were attributed, in part, to the freezing of soil, which appears to encapsulate some of the waste, portions of which are being allowed to partially thaw.

Mr. Meyer went on to provide the Explanation of Significant Differences (ESD). The ESD documents the reasoning for the high increase in cost of this project. Some of those significant changes were:

- Increased material volume from 546 cubic yards to 2355 cubic yards requiring larger freeze wall and additional phases of removal
- Finding of reactive and explosive materials requiring changes in air treatment and handling

- Finding of biological wastes requiring improvement in handling and testing

During the initial trenching operations Pits 2, 3, and 4 were found to be much shallower than Pit 1. In addition, because of the more suitable soil conditions, availability of spill-containment equipment, and the in-place handling and safety procedures, excavation of those pits can be done without a freeze wall in place.

The current schedule was reviewed with Pit 1 scheduled to be completed by April/May 2003, followed by planning and setup for the remaining pits (pending funding). It was noted that funds have been obligated to complete Pit 1. The most recent funding for FY 02 was for $539K received on September 30.

Colonel Ball stressed the funding support provided by the Army for this project. The final cost for Pit 1 is approximately $20 million with the cleanup of the remaining pits estimated at nearly $10 million. At this point, additional funding for Pits 2, 3, and 4 is shown for FY 04. Acceleration of that funding schedule will be pursued to enable immediate startup of the remaining pits upon completion of Pit 1. Historically, this has not been a problem and is not anticipated to be a problem in the future.

6. Area A Update

Mr. Meyer continued with the presentation with the Area A Update. There were no new items completed since the August RAB meeting. The May sampling report should be completed in October. The next scheduled round of samplings will be conducted in November, pending funding. When questioned about the source of the previously detected TCE contamination, Mr. Meyer advised that it was believed to be a spill from a chiller at Building 568 which has since been removed. There remains only residual contaminated soil and groundwater contamination below where the chiller once was.

7. Area B Update

Mr. Meyer then presented a review and update on the documents for Area B. The Background Study and the B-20 North Follow-On Work Plan should be completed during October. There have been no completed tasks since the last meeting and the standard quarterly monitoring will continue, as will the planning for the Dye Trace Study and the water treatment system for the affected resident. Upon inquiry, Mr. Meyer advised that another well, also owned by the Krantz family, located across the street from the current Krantz home, is not used by the affected resident's consumption and is, in fact, scheduled for demolition. Results of other well testing performed by a developer have not yet been received by Fort Detrick.

Mr. Meyer went on with the TCE and PCE Plume graphics indicating that the TCE levels are on the low side of the range of concentrations determined in previous samplings and the concentrations of PCE are generally decreasing with the highest detection at Well 31D as has

previously been the case. Wells sampled were mainly the boundary wells and it was pointed out that the one well was not included in the recent sampling due to continuing negotiations on rights of entry. No changes in residential boundary well data other than Well 66, which as in the past, had a low reading of trichloroethylene, and is below the MCL.

8. Area B Water Levels

Again, it was shown that groundwater elevations dropped about 0.5 to 2 feet from February 2002 with an average loss of 1.98 feet. The area under the active landfill, which previously had a higher peak, is continuing to flatten out. Since 1998, the average groundwater level has been reduced by approximately eight feet and is attributable to the ongoing drought. No other changes were noted.

9. Area C Update

Finalization of the groundwater data assessment continues. The Final Report has been funded and scheduled for completion during the winter of 2003. The removal of the ash pile located near the former incinerator and the current wastewater treatment plant has assisted in the risk assessment. Also located in this area was the former sludge stockpiling area.

A discussion was held regarding privatization of the activities of the wastewater treatment plant and the retention of those duties by Fort Detrick. Colonel Ball provided a description of the sludge collected as well as its contents, removal and disposal methods, and the effect of the NRC license held by Fort Detrick. The individual laboratories are currently being licensed for control and disposal of chemical waste, which will enable the decommissioning of the Fort Detrick installation license. An inquiry was made into the prioritization of the project and if it would return to its original level. An affirmative response was given stating that the goals for all areas remain, and the emphasis will be more in line with the original prioritization.

10. Community Co-Chairman Comments

Mr. Toomey advised he had no further comments.

11. Date/Agenda Items for Next Meeting

RAB meetings are held bimonthly on the second Wednesday of the month. The next meeting will be Wednesday, December 11, 2002, at 7:30 p.m., at Fort Detrick.

Colonel Ball commented that due to other operations being conducted at Fort Detrick, the formation of a Community Board is being explored. This group would be involved as a community outreach group sharing information about operations at Fort Detrick. Mr. Chuck Dasey will be gathering input for the formation basis of the group. With the impending

establishment of the Department of Homeland Security, there would be a significant impact upon Fort Detrick as part of that departmental infrastructure.

12. Meeting Closing

The meeting adjourned at 9:00 p.m.

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Reviewed by:

Donald F. Archibald
Lieutenant Colonel, US Army
Co-Chairman

//s//

Approved/Disapproved

John E. Ball
Colonel, US Army
Deputy Installation Commander

Enclosure:
1. Fort Detrick Remedial Investigation / Feasibility Study

DISTRIBUTION:
Each RAB Member (w/o enclosure)
Each Meeting Attendee (w/o enclosure)